

PHYSICAL CONTACT AS IT RELATES TO
SEX, AGE AND RACE: A STUDY OF
INTERPERSONAL RELATIONS

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ABSTRACT

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PHYSICAL CONTACT AS IT RELATES TO SEX, AGE AND RACE: A STUDY OF INTERPERSONAL RELATIONS

This research was designed to investigate several factors as they relate to touching/physical contact between individuals. For purposes of this study touching was defined as intentional contact between two or more persons which is relatively spontaneous and affective in nature.

The Equilibrium Theory of Intimacy developed by Argyle and Dean (1965) was used to form the conceptual framework for this study. This theory states that when two persons are interacting on a nonverbal level, a kind of unspoken pressure is exerted to maintain a certain level of interaction in which both persons feel comfortable. It was assumed that females, regardless of race, and blacks, regardless of sex, felt more comfort with contact between them than their male and white counterparts, respectively. Similarly, it was assumed that older persons (61-70 years) and youth (21-30 years) were equally likely to have higher degrees of comfort with touching than their middle-age

counterparts. Based upon this theory and previous research it was hypothesized that females would be more likely to engage in physical contact than males; the elderly would be just as likely as the young to display physical contact; and there would be a greater occurrence of physical contact among blacks than whites.

The sampling technique used for the collection of data in this study was purposive sampling. As such, the research focused on the secondary analysis of data on a matched subsample consisting of males and females, grouped into three age categories, ranging from 21-30, 41-50, and 61-70 black and white.

Tabulations involved the use of Chi-Square. Lambda and Gamma were employed where necessary to establish the existence of relationships.

Analyses of data revealed that the hypothesized relationships among the variables were not upheld by statistical tests except on a few items. On one item pertaining to sex it was found that females were more inclined to engage in touching than males, which tended to support the initial hypothesis. While on two items findings suggested that in certain situations males engage in touching more than females. Also when looking at ethnicity it was found that blacks engaged in touching more than whites (Tables 4 and 5). However, in examining data in a more broad sense it was concluded that in relationships which are affective in nature, regardless of one's sex, age, or race positive physical contact is desired.

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STATEMENT OF PROBLEM

Communication is an important aspect of human behavior, as it conveys how one thinks and feels as well as being a component of the social interaction process. Certain non-language behaviors such as voice quality (paralanguage) and body motion, touch, and use of personal space (proxemics) appear to play a prominent role in the way people communicate with one another. During the past decade, research has grown in this area in an effort to specify and to understand the communicative function of these behaviors which have been termed nonverbal. Although most of the research has focused on the various forms of this behavior, very little has been reported on interpersonal touch. Touch obviously may reflect intimacy, and also has obvious sexual implications for Americans.

The purpose of this study is to investigate several factors as they relate to the occurrence of interpersonal touching. Touching can be defined as intentional contact between two or more individuals (Watson, 1975). This type of physical contact can be divided into two categories: (1) instrumental touching, which is deliberate physical contact initiated to facilitate the performance of another

act that is the primary aim of the initiator, and (2) expressive touching which is relatively spontaneous and affective in nature (Watson, 1975). It is the latter form which will be of concern in this paper. Touching behavior will be measured by self-reports on various forms of physical contact which seem to convey some form of intimacy. Factors which will be taken into account in regard to this type of behavior will be sex, age, and ethnicity.

CHAPTER I

REVIEW OF LITERATURE

Sex

It is stereotypically implied that heterosexual males in American society do not desire, and more importantly choose not to openly express warmth, intimacy, or contact with other males (Greenbaum and Rosenfeld, 1981). As a result, men tend to develop goals for more stringently defined distances from others; especially other males (Leibman, 1970). Furthermore, they are expected to behave in ways symbolizing this distance, such as shaking hands instead of hugging when greeting another male (Greenbaum and Rosenfeld, 1981).

On the other hand, female sex norms are quite the opposite. Throughout the socialization process, women are reinforced for being dependent, emotional, socially oriented, and capable of forming deep intimate relationships. Unlike men, they are allowed and expected to express warmth, tenderness, and affection. At the empirical level, findings suggest that females are in fact oriented to be more expressive, affiliative, and sociable than males (Ickes and Barnes, 1978; Leibman, 1970).

In studies on proxemic behavior -- more specifically, those on personal space -- it has been shown repeatedly that females have a smaller personal space than males (Sommer, 1959; Little, 1965; Leïbman, 1970; Mazur, 1977), indicating a greater tendency towards intimacy. In research on actual touching behavior, Williams and Willis (1978) found in their study of interpersonal touch among preschool children, that females were more likely than males to engage in some form of touching when interacting. Further, Willis and Reeves corroborated this finding in their observations among junior high students' touch interactions. This tends to indicate that the socialization of males and females towards their respective sex roles begins at an early age.

Of still greater importance, Jourard and Rubin (1969), in a study of self-disclosure and touching, found that although these two modes of intimacy were independent, females displayed greater accessibility to physical contact than males. That is, females not only appear likely to touch others more, but also they are likely to be touched more by others.

Age

In a study of interpersonal spacing, Baxter (1970) reported that as age increased, so did the distance between

interacting pairs. Age levels were categorized as child, adolescent, and adult.

Heshka and Nelson (1972) reported this same relationship, and posited the explanation that the increase in interpersonal distance as individuals approach adulthood could be the result of changes in dependency behaviors which occur with increasing maturity. As the child grows, certain types of dependent behaviors such as lapsitting, clinging, and direct affection are discouraged, while independence is encouraged. Thus, independence training could operate on interpersonal distance in such a way that physical proximity is directly discouraged as a part of that training.

Moreover, it was found that among subjects, who ranged from nineteen to seventy-six, the younger and older dyads stood closer together than middle-aged dyads (Heshka and Nelson, 1972). This suggested that the true relationship, when looked at over a large age range, is curvilinear. This was based on the observation that as the age of the dyad exceeded forty, interpersonal distance decreased. A portion of this decrease may be attributed to the effects of aging, such as loss of hearing acuity, as well as increased dependency. Hence, closer distances in old-age may possibly reflect physical

debilitation and a greater reliance on others, rather than attraction motivated by interpersonal liking.

Ethnicity

Hall (1963) proposed that not only are there differences in proxemic behaviors between countries which were considered to be contact cultures and those considered to be noncontact cultures, but also differences can be observed between subcultures within the same nation. Previous research has indicated that with regard to race, blacks are more likely to exhibit closer proxemic behavior than whites.

In a study of race and personal space, Bauer (1973) observed thirty black males and females and thirty white males and females. In terms of mean distances, it was found that the white males chose the most distance position (17.8 inches), white females were next (13.4 inches), black males, (11.4 inches), and black females were the most proximal (8.1 inches). These findings tend to suggest that blacks have a closer proximal distance than whites when interacting. Even further, in studies dealing with children and interpersonal touch, it has been reported that blacks touch blacks more than whites touch whites (Willis and Hoffman, 1975; Willis and Reeves, 1976).

Socioeconomic Status

Social class may also be important in the patterns of touch behavior. Clay (1966) found that working-class mothers touch their children nearly twice as often as did middle-class and upper-class mothers (Williams and Willis, 1978). Also, Schmidt and Hore (1970) reported more touch between low-income children and their mothers, than among high-income pairs in a problem solving situation.

Furthermore, Williams and Willis (1978), in their observations of black low- and middle-income preschoolers; and white low- and middle-income preschoolers at play, reported higher rates of touch for middle-income children. Scherer's (1974) observations seem to concur with these findings.

Summary

The objective of this research is to investigate sex, age, and race as they relate to the occurrence of interpersonal touching behavior. As previously mentioned, there appears to be very little research about touching behavior, and it is the intention of this study to help further establish information on this type of proxemic behavior.

Although most of the research cited pertains to personal space/distance, it is hopeful that these previous findings can be extended to aid in documenting conclusions drawn in this particular study. Even further, it is expected that some of the observations made on children will hold true for adults when looking at the variables under consideration -- for example, race.

CHAPTER II

THEORETICAL BACKGROUND

Most people spend a great deal of time engaging in some kind of social interaction. It is well known that relations with others can be a source of the deepest satisfaction and of the darkest misery. However, detailed analyses of social interaction and relations have been lacking. Through recent research, social psychologists have made these phenomena much clearer. In particular, important advances in the experimental analysis of social encounters at the level of such things as eye movement, the timing of speech, and nonverbal communication have been made (Argyle and Dean, 1965; Boomer and Dittman, 1962; Exline, 1963).

This research has a number of possible applications. Many work routines consist of dealing with people, rather than with things, for example -- teachers, psychologists, and managers. Research has focused on the social techniques which are most effective in human relations and how such skills can be taught (Argyle, 1967). Because some people are unable to establish and maintain social relationships with others, many are lonely and unhappy, while others are mentally ill. Conflicts between different social classes and different cultural groups

are partly due to the difficulties of interaction. Many of these difficulties and frustrations could be eliminated by a wider understanding and training in the skills of social interaction (Argyle, 1967).

In the present state of knowledge it looks as though social behavior is the product of at least seven different drives, which are listed below. A 'drive' can be defined as a persistent tendency to seek certain goals (Argyle, 1967). At present there is no final agreement on how social motivation should be divided up. However, a provisional list of seven motivational sources of interpersonal behavior has been offered. These goals are either responses which are sought from others, or types of relationships with other people (Argyle, 1967). The seven motivational sources are as follows:

1. Non-social drives which can produce social interaction--various kinds of cooperative or competitive behaviors.
2. Dependency--acceptance, interaction, help, protection and guidance, especially from people in positions of power and authority.
3. Affiliation--physical proximity, eye-contact, warm and friendly responses and acceptance by peers and groups of peers.
4. Dominance--acceptance by others, and groups of others as the task leader, being allowed to talk most of the time, make the decisions, and be deferred to by the groups.

5. Sex-physical proximity, bodily contact, eye-contact, warm, friendly and intimate social interactions, usually with attractive peers of the opposite sex.
6. Aggression--to harm other people physically, verbally, or in other ways.
7. Self-esteem and ego identity--for other people to make approving responses and to accept the self-image as valid.

In the cases of sex, aggression, and affiliation, there may be restraining forces which prevent the goal from being attained. When the drive is aroused, there is also arousal of inner restraints, possibly because of punishment in the past. The study of such conflicts has shown that such a drive which has been aroused, but thwarted may be satisfied in an indirect way, which is explained by the equilibrium theory (Argyle and Dean; Argyle, 1967). How this theory operates in connection with affiliation will be the main topic of concern.

The need for affiliation leads to physical contact, eye-contact, and other forms of intimacy with others. Previous laboratory research has found that subjects who have strong needs for affiliation spend time establishing relationships with other people (Argyle, 1967). This probably leads to interaction with members of the opposite

sex as well, however, presently it is difficult to distinguish its effects from those of the sexual instinct which appears to be closely related.

It has long been believed that affiliative behavior develops in some way out of dependency, as there is quite a bit of evidence to support this theory (Argyle, 1967). Harlow's monkeys showed no evidence of affiliative behavior unless they had been reared by a real mother (Argyle, 1967). It has also been found that affectionless psychopaths often have a history of maternal deprivation (Argyle, 1967). Another version of this theory suggests that anxiety reduction through contact with mothers reinforces social contacts in general. Schachter (1959) found that college girls who had been anxious about the prospect of receiving electric shocks for incorrect responses in a problem-solving situation chose to wait for their turn with others rather than wait alone (Schachter, 1959).

In as much as it may seem difficult to see how a dependency pattern of behavior becomes transformed into an affiliative one, Argyle (1967) postulated the following: When contacts develop between children of the same age, the relationship that may develop shifts in affiliative orientation from child-parent to an interdependent peer relationship. This affiliative motivation is generated by early experiences with other infants.

Further, if the affiliative motivation is to be viewed as a drive in some way similar to hunger and thirst, it stands to reason that it should also be aroused through deprivation. Numerous experiments have been conducted in which subjects have been isolated for periods of time and afterwards seemed more responsive to social rewards. Gewirtz and Baer (1958) found that after children had experienced periods of isolation for as short a time as twenty minutes, they appeared more receptive to social rewards. Walters' and Parke's (1968) findings tend to concur, however they also suggest that anxiety during the period of isolation must occur for social interaction to be rewarding.

Based on the fact that affiliation is viewed as a social drive, Argyle and Dean (1965) developed what is known as the Equilibrium Theory of Intimacy. This theory suggests that such behaviors as interpersonal distance, eye-contact, facial expressions, topic of conversation, and tone of voice all serve to express 'intimacy' towards another in social interaction. Once a comfortable level has been achieved between individuals, there will be a kind of pressure to maintain that level of interpersonal intimacy. Accordingly, any subsequent change in one or more of the intimacy components should produce compensatory

reactions for the restoration of equilibrium, or the level to which both individuals feel comfortable.

Although social techniques for interacting with others cover a wide range of levels of communication -- from types of bodily contact to gestures and communication, the same message can be conveyed at various levels. Furthermore, these elements of verbal and nonverbal behavior become integrated into general 'styles' of behavior such as those used to establish intimacy or dominance (Argyle, 1967).

In an attempt to gain a greater understanding of the interaction process, much research has been done on the various nonverbal aspects of communication.

Different Kinds of Nonverbal Social Acts

Physical Proximity and Position

Physical proximity and position are important primarily in relation to intimacy and dominance. Proximity is one of the cues for intimacy, both sexual and between friends of the same sex. The normal degree of proximity varies between cultures, and every species of animal has its characteristic social distance (Argyle, 1967). Closer distances are usually adopted for more intimate conversations. And at the closest distances,

different sensory modes are used -- the smell and thermal senses come into operation, and vision becomes less important (Hall, 1963).

If one person is higher up than another -- by being on a rostrum, standing, or simply by being taller, it puts him in a somewhat dominating position. The significance of height as a symbol of authority may be transferred from developmental experiences with parents as persons who are taller than children (Argyle, 1967).

Gestures

Gestures are movements of hands, feet, or other parts of the body (LaBarre, 1967). Some are social techniques intended to communicate definite messages; others are involuntary social cues which may or may not be interpreted correctly. Some gestures form a kind of language -- such as those used among the deaf. The gestures in everyday use in Italy and Greece are mainly to indicate emotional states and intended actions (Argyle, 1967).

Also, by general bodily posture a person may indicate his emotional state, for example, as tensed or relaxed. A person can display his attitude towards others present, such as when they sit in a different way from others, or put their feet on the table.

Bodily orientation is also important. People face those with whom they want to interact. People cooperating tend to sit side by side, those competing tend to sit facing one another.

Facial Expressions

Facial expressions can be represented through changes in eyes, eyebrows, and mouth. Emotions can be recognized to some extent from facial expressions such as smiling and frowning to represent pleasant and unpleasant feelings, respectively (Goffman, 1955). However, during interaction, frowns and smiles do not necessarily indicate emotional states: smiles are parts of greetings, and are used to encourage or appease, regardless of the emotion being experienced (Argyle, 1967).

Eye Movements

Eye movements may have an effect quite out of proportion to the physical effort exerted (Argyle and Dean, 1965). When A looks at B, in the region of the eye, B knows A is primarily attending to him and that interaction can proceed. If A gazes for a long time at B, this can have a variety of meanings, depending on A's facial expression and on the situation -- it can be an amorous, friendly, aggressive, or curious gaze -- in each case revealing some feeling of A towards B (Argyle, 1967).

Bodily Contact

Bodily contact is the most primitive kind of social act and is found in all animals (Argyle, 1967). In addition to aggressive and sexual contacts there are various methods of influence such as being pushed, pulled, or led. There are also symbolic contacts, such as petting on the back, and the various ways of hand shaking (Argyle, 1967).

There are great cross-cultural difference in bodily contact. Usually bodily contact conveys intimacy and occurs at the beginning and end of encounters (Argyle, 1967). In an attempt to contribute more knowledge to the social process of nonverbal communication, this research aims to explore the role of touching or body contact in connection with sex, age and race.

Summary

Based upon previous research and the Equilibrium Theory of Intimacy, with regard to physical contact, it appears

reasonable to postulate that females would have a greater need for body contact, since they appear to be more contact oriented than males (Ickes and Barnes, 1978; Leibman, 1970). Next, with regard to age it would appear that there is no difference between the young and old in need for body contact. Empirical evidence has shown that the old enjoy interpersonal relationships just as much as the young; even further they enjoy sexual relations as well (Heshka and Nelson, 1972; Dean, 1974). Finally, there is evidence to suggest that blacks interact at closer distances than whites. This suggests that blacks may have a greater need for physical contact than whites (Willis and Reeves, 1976).

Hypotheses

Based upon the findings of previous research, it seems plausible to hypothesize the following:

1. Females are more likely to engage in some form of physical contact than males.
2. The elderly are just as likely to display physical contact as are the young.
3. There is likely to be a greater occurrence of physical contact among blacks than among whites.

CHAPTER III

METHODOLOGY

Data Collection Technique

Purposive sampling was the technique used for the collection of data in this study. The high selectivity accompanying this technique guarantees that all relevant strata will be represented in a given research design (Black and Champion, 1976). Thus, given that certain variables were presumably known to be relevant to the research, individuals were sought who were known to possess those characteristics. Variables which have been shown to have some bearing on interpersonal relations are sex, age and race. The original data were collected by Watson (1978). As such, secondary analyses were conducted in this thesis.

Since previous research has indicated that sex differences exist in relation to interpersonal behavior, it was important to gather data on fairly large and equal numbers of males and females. Secondly, it was important to take into account age-related differences, which have previously been observed in research. Finally, comparisons were made between blacks and whites to permit

taking into account the possibility of racial variations. As such, the research focused on secondary analyses of data on a matched subsample consisting of males and females, ranging in age from 21-30, 41-50, and 61-70; being catagorized as young, middle-aged, and old respectively; black and white.

Instrument

The "Body Contact Questionnaire," a brief 24-item instrument constructed by W. H. Watson (1978), was the principal means of data collection (see Appendix B). It includes a scale that permits: (1) the measurement of the intensity of an individual's need for body contact; (2) the determining of whether one's self, one's partner, or one's friends are contact persons; and (3) the collection of data on the frequency of coital and/or other kinds of sexual activity.

Data Analysis

Touching behavior was measured by items 10 through 23 of The Body Contact Questionnaire and by the composite body contact score. Items used for touching/physical contact and in the computation of the body contact score had response categories comprised of "never", "almost never", "sometimes", "almost always", and "always", and

were assigned numerical values of 1, 2, 3, 4, and 5 respectively. This, in turn allowed subjects to receive a composite body contact score ranging from 11 to 61. Next scores were collapsed into three categories -- low, medium, and high.

Race was determined by the subject's response to question 5, which has response categories of black, white, Hispanic, Asian, Indian, and other. However, for this research project only the categories of black and white were taken into account and coded with numerical values of 1 and 2.

Because of the fact that the dependent variable is measured on an ordinal scale, data analysis involved the use of Chi-square and Goodman and Kruskal's Gamma.

Chi-square was used to measure the presence or absence of relationships between race and touching/physical contact, and sex and touching/physical contact. Gamma was employed to measure the strength of these relationships.

Chi-square was chosen because of the general tendency to employ this technique when dealing with nominal/ordinal combinations. Usually not much accuracy is lost when this technique is used. Gamma was used to measure the strength of the relationship between age and touching/physical contact.

Limitations

There are several limitations to be considered when utilizing purposive sampling techniques. Among them are the problems of representativeness, and the extent to which respondents will answer a questionnaire completely and honestly.

As has been stated earlier, previous research has shown sex, age, and race to have some bearing on interpersonal relations. Persons were sought who were known to possess these particular characteristics, thus hoping to increase the representativeness of the sample. Further, the truthfulness of each respondent when answering questions cannot be fully insured, as it is likely that respondents may choose the response which may appear to be the most socially acceptable.

Finally, several tests were not run because of malfunctions within the computer system. As a result, information was lost which might have yielded more insight on the object of analysis.

CHAPTER IV

FINDINGS

Sex

Although previous research on interpersonal relations tends to suggest that females are more inclined to engage in some form of interpersonal touch than males, only data from Table 1 appear to support that hypothesis.

TABLE 1
A COMPARISON OF SEX AND LIKES TO BE
HELD WHEN UPSET

Likes to Be Held When Upset

Sex	Almost		Sometimes	Almost		T	N
	Never	Never		Always	Always		
Male	18.1	22.9	34.0	15.3	9.7	100.0	144
Female	10.2	11.0	45.4	27.7	5.8	100.0	137
							281

**Chi-square = 17.61 Significance level .001
4 degrees of freedom

TABLE 2

A COMPARISON OF SEX AND THE ENJOYMENT
OF SEXUAL RELATIONS

Enjoys Sexual Relations

Sex	Never	Almost Never	Sometimes	Almost Always	Always	<u>T</u>	<u>N</u>
Male	0.7	0.0	19.7	36.1	43.5	100.0	147
Female	0.7	2.9	33.3	39.1	23.9	100.0	138
							285

**Chi-square - 17.50 Significance level .001
4 degrees of freedom

Other findings suggested that, in certain situations, males may engage in touching more than females (Tables 2 and 3). However, all remaining tables tend to imply that no relationship exists between sex and touching behavior.

TABLE 3

A COMPARISON OF SEX AND ENJOYS
WATCHING CONTACT SPORTS

Enjoys Watching Contact Sports

Sex	Never	Almost Never	Sometimes	Almost Always	Always	<u>T</u>	<u>N</u>
Male	20.0	6.1	17.6	27.7	46.6	100.0	148
Female	20.3	18.1	32.6	14.5	14.5	100.0	138
							286

**Chi-square - 66.71 Significance level .001
4 degrees of freedom

An exception to the findings shown in Table 1 is in the preference shown by males for watching contact sports, a form of vicarious contact. Table 3 lends support to this hunch. Greenbaum and Rosenfeld (1981), found in their study of various ways of touching when greeting others, that nonverbal behaviors among males are characterized by concern for aggression and competitive achievement. Males appear to have stringent concerns with status and roles which are socially prescribed or "correct" behaviors (Broverman, Vogel, Broverman, Clarkson and Rosenfrantz, 1972; Frieze and Ramsey, 1976). Table 2 lends support to this.

While previous research suggests that females are "oriented" to be more emotional than males (Ickes and Barnes, 1978; Leibman, 1970), when physical and emotional satisfaction are simultaneously taken into account, there may be no difference between the sexes. That is, both males and females prefer situations and/or relationships which prove to be both physically and emotionally gratifying. Reedy, Birren, and Schaie (1978) found in their study of age and sex differences in satisfying love relationships that there was no difference between males and females on the importance of intimacy and communication. This suggested that an important criteria for a satisfying relationship may be the presence of an equal amount of

interest and involvement in sexual intimacy and verbal communication (emotional support) by both partners.

Hence, it may be concluded that relationships or situations which involve feelings of emotional and physical satisfaction are important to both men and women. However, in situations where men are expected to be more aggressive, such as initiating sexual intimacy or enjoying contact sports, males tend to fulfill the stereotype suggested by society.

Age

Heshka and Nelson (1972) reported that the true relationship between age and interpersonal distance was one of a curvilinear nature. When the relationship is looked at over a wide age range, the youngest and oldest dyads stood closer together when interacting than the middle-aged dyads. The explanation given for this observation was that the closer interacting distances noted among the oldest dyads may merely reflect physical debilitation and a greater reliance on others. That is, a portion of the decrease in distance was possibly due to the effects of aging, such as loss of hearing as well as physical dependence. However, there was only slight evidence of a curvilinear relationship between age and touching behavior in this research (Tables 6, 7, 8, 9, 10 and 11 - see Appendix A).

In as much as this relationship may be a function of physical debilitation, as Heshka and Nelson reported, could it not also be true that the elderly enjoy touching just as much as the young. Reedy, Birren, and Schaie (1981), reported in a study of age and sex differences in love relationships, that the older age group rated tender feelings of affection and loyalty as most important to love relationships, and rated sexual intimacy as less important. However, it should be noted that feelings of affection can entail simple touching behaviors as hand holding, kissing, caressing, and fondling which are all considered forms of sexual play (West, 1975). Among persons ranging from 68-80, previous research on sexuality has shown that physical love and sex in one form or another not only existed, but it also was an important part of their lives (Newman and Nichols, 1960; Dean, 1974; Pfieffer, 1974; and West, 1975).

Even though there may be instances when younger age groups engage in sexual activity as a mere form of sexually satisfying exercises, the elderly condone the use of sexual activity in this manner. Thus they seem more concerned with socially and morally appropriate ways of expressing sex (Newman and Nichols, 1960). In their

eyes, sexual activity of any kind is the mutual expression of love, and such activity should only take place with one's spouse or love companion.

It should also be added that Pfieffer (1974) has reported that one major determinant of whether or not any type of sexual expression continues into the later years of life, is whether or not the person(s) have been highly interested and highly sexually active in the younger years.

One should not conclude that intimacy of any form is not important or does not exist among the middle-aged and aged individuals. Reedy, Birren, and Schaie (1981) found that the young and middle-aged groups tend to place the same amount of importance on sexual interest. However, the current research reported in this thesis seemed to suggest more similarity between the responses of the youngest and oldest age groups. Finally, it should be noted that in previous literature on age differences in affective relationships, when the age groups were asked to rate which component was most important; young, middle-aged, and old, all rated emotional security as number one (Reedy, Birren and Schaie, 1981).

Ethnicity

Hall (1963) argued that one of the basic ways in which perceptions differ across cultures is in the meanings of spatial relationships. Even further it was contended that these same differences may occur between subcultures within the same nation. This suggested that differences between subcultures may be observed in the ways they interact with one another.

While there is previous empirical evidence to support the hypothesis that blacks interact at closer distances than whites (Bauer, 1973; Willis and Hoffman, 1975; Willis and Reeves, 1976), evidence from this study seemed to indicate this finding on only two items (Tables 4 and 5). However, data from this research appeared to imply that there was no significant difference between blacks and whites in the amount of physical contact/touching they prefer to engage in.

In a study on the proxemic behavior of primary school age children at play, Scherer (1974), observed among same sex and same race dyads that no difference existed between blacks and whites and the amount of distance at which they interacted. Of still greater importance, Aiello and Jones (1971) observed, in a study of young children in three

TABLE 4

RELATIONSHIP BETWEEN ETHNICITY AND FINDING IT
EASIER TO RELAX AND SLEEP WHEN HELD

Finds It Easier to Relax When Held

Ethnicity	Almost		Sometimes	Almost		<u>T</u>	<u>N</u>
	Never	Never		Always	Always		
Blacks	15.7	22.9	31.4	17.6	12.4	100.0	153
Whites	9.9	12.2	37.4	35.1	5.3	100.0	131
							284

Chi-square = 21.62 Significance level .001
4 degrees of freedom

TABLE 5

ETHNICITY AND DISCOMFORT WHEN NOT HELD
BY SOMEONE FOUND ATTRACTIVE

Feelings of Discomfort When Not Held

Ethnicity	Almost		Sometimes	Almost		<u>T</u>	<u>N</u>
	Never	Never		Always	Always		
Blacks	14.4	26.8	34.6	15.7	8.5	100.0	153
Whites	6.9	22.9	48.1	19.1	3.1	100.0	131

Chi-square = 11.09 Significance level .05 284
4 degrees of freedom

subcultural groups (blacks, puerto Ricans, and Whites), that the magnitude of interacting distances differed minimally between lower-class blacks and lower-class whites. The finding by Aiello and Jones (1971) reinforces findings that members of poverty subcultures tend to be rather similar to one another in their proxemic behavior (Scherer, 1974). Their findings also suggest that differences observed between subcultures could possibly be a function of socio-economic level rather than ethnicity or subcultural identification. Although it was hopeful that socioeconomic level could be examined in relationship with physical interaction, computer malfunctioning prevented this information from being obtained. On the matter of ethnicity and physical contact/touching, it should be noted that the absence of a significant relationship between these two variables may be due to the possibility that blacks and whites equally prefer giving and receiving emotional support and physical interaction in interpersonal relationships.

Summary

In lieu of the results of this research, it should be kept in mind that interpersonal touch is a relatively new area of study. Inasmuch as data from this study did not totally support previous findings on physical contact,

there are a few factors which should be taken into account.

First, most of the material on interpersonal touch involved research which utilized direct observation as the data collection technique. That is, subjects were observed in an everyday situation, with the researcher charting the frequency of physical contact occurring. However, data collection from this study was based on self-reports and the questions were more affective in nature.

Secondly, despite the fact that this study design attempted to measure the need for body contact, it should be mentioned that items on the questionnaire may have been measuring another aspect of intimacy -- the emotional component. The majority of the questions seemed to represent some aspect of the subjects' feelings toward a particular situation, for example, "When I see a loved one, I initiate embracing," "When upset, I like someone to hold me," and "I feel hurt if I am not held when I desire closeness with someone whom I find attractive."

Furthermore, there were several hypotheses which could not be tested due to malfunctions within the computer system. Hence, it is felt that possibly the results from that data might have yielded more fruitful information.

It should also be noted that for all three independent variables (sex, age and ethnicity) virtually no significant difference was found in the need for body contact when comparisons were made between males and females, the old and young age groups, and blacks and whites.

Although this research did not appear to give much support for need for body contact, perhaps it could lend further support to research on intimacy and affective relationships. It appears that in all cases of sex, age, and ethnicity, when the emotional and physical components of intimacy are taken into account, both seem to have equal importance. That is, when people are relating to one another in an intimate way, or when physical contact is desired, emotional support is also desired regardless of one's sex, age, or ethnicity.

CHAPTER V

SUMMARY AND CONCLUSIONS

The intention of this study was to investigate several factors in relation to interpersonal touching/physical contact. Touching was defined as intentional contact between two or more individuals. More specifically, expressive touching, which is relatively spontaneous and affective in nature, was the topic upon which this paper was focused. Touch is extremely significant in the nonverbal aspect of communication as it plays a key role in the transmission of emotions.

In an attempt to explain the social process of nonverbal communication Argyle and Dean (1965) developed what is called the Equilibrium Theory of Intimacy. This theory simply states that when in a given situation, if the initiator of physical contact does not perceive the situation and the receiver of physical contact accurately, then the receiver will respond in a way contrary to that of the initiator's expectations, thus re-establishing a comfortable level of interaction. In preparing this research it was hopeful that this theory would apply to situations which were affective in nature, using need for body contact as the measure of intimacy.

Since females have been shown to be more affective, it would appear that they would be more responsive to physical contact. Secondly, since the elderly seem to enjoy intimate relations just as much as the young, it was expected that they would be as responsive to physical contact as the young. Finally, since blacks appear to interact at closer distances than whites, it was felt they they would be more responsive to physical contact than whites.

The research was conducted by collecting data on fairly large, but equal numbers of males and females, through the use of The Body Contact Questionnaire. Then these groups were subdivided by age and race. The age category was broken down into three age groups.

After analyzing the data with the appropriate statistics, it was discovered that at the significance level when looking at sex, females were more inclined to engage in touching in one item, while on two items males appeared more inclined than females. In relation to ethnicity only two items supported the initial hypothesis that blacks are more likely to engage in touching than whites. However, when looking at all three independent variables (sex, age, race) in more general terms there appeared to be no significant difference in relation to need for body contact. Following

this observation it was then concluded that when examining relations which entail both emotion and physical satisfaction, regardless of one's sex, age, or race, there appears to be a need for body contact.

In spite of the results, it should be mentioned that in reality the need for body contact may or may not be met because everyone may not be able to establish and maintain adequate affective relationships with others. This apparently is a skill which is acquired through a social learning process.

It is hopeful that the information obtained through this research will contribute to understanding interpersonal relationships. Perhaps in the use of counseling couples, individuals will be made more aware of their partners' needs. For instance, females need to be made more aware of males' needs for emotional as well as physical needs in a relationship. Or, it could be useful in making the public more aware of the needs of the elderly.

A P P E N D I X A

(Tables 6 - 11)

TABLE 6

A COMPARISON OF AGE AND LIKES TO BE
HELD WHEN UPSET

Liking To Be Held When Upset

Age	Never	Almost Never	Sometimes	Almost Always	Always	<u>T</u>	<u>N</u>
Young	25.9	10.6	41.2	11.8	10.6	100.0	85
Middle-Aged	9.2	23.5	43.9	18.4	5.1	100.0	98
Old	9.2	16.3	33.7	32.7	8.2	100.0	98
							281

Gamma = .199

TABLE 7

A COMPARISON OF AGE AND FINDING IT EASIER TO
RELAX AND SLEEP WHEN HELD

Finds It Easier To Relax When Held

Age	Never	Almost Never	Sometimes	Almost Always	Always	<u>T</u>	<u>N</u>
Young	21.2	12.9	37.6	15.3	12.9	100.0	85
Middle-Aged	11.1	27.3	38.4	21.2	2.0	100.0	99
Old	8.9	12.9	26.7	38.6	12.9	100.0	101
							285

Gamma = .225

TABLE 8

A COMPARISON OF AGE AND TOUCHING
PEOPLE WHEN TALKING

Touches People When Talking

Age	Almost Never		Sometimes	Almost Always		T	N
Young	14.1	18.8	55.3	7.1	4.7	100.0	85
Middle-Aged	7.1	24.2	38.4	29.3	1.0	100.0	99
Old	5.0	16.8	44.6	26.7	6.9	100.0	101
							285

Gamma = .235

TABLE 9

A COMPARISON OF AGE AND DISCOMFORT WHEN NOT HELD
BY SOMEONE FOUND ATTRACTIVE

Feelings of Discomfort When Not Held

Age	Almost Never		Sometimes	Almost Always		T	N
Young	17.6	18.8	43.5	11.8	8.2	100.0	85
Middle-Aged	11.1	34.3	42.4	11.1	1.0	100.0	99
Old	5.9	20.8	36.6	27.7	8.9	100.0	101
							285

Gamma - .202

TABLE 10

A COMPARISON OF AGE AND THE TYPE OF
DANCING PREFERRED

Type of Dancing Preferred

Age	Fast	Fast and Slow	Slow	<u>T</u>	<u>N</u>
Young	15.2	63.3	20.3	100.0	78
Middle-Aged	13.0	42.4	42.4	100.0	90
Old	1.0	63.5	33.3	100.0	94
					262

Chi-square = 22.45
4 degrees of freedom

TABLE 11

A COMPARISON OF AGE AND NEED FOR BODY CONTACT

Body Contact

Age	Low	Medium	High	<u>T</u>	<u>N</u>
Young	0.0	58.8	41.2	100.0	85
Middle-Aged	2.0	69.0	29.0	100.0	100
Old	4.0	46.0	50.0	100.0	100
					285

Gamma = .096

A P P E N D I X B

(Body Contact Questionnaire)

BODY CONTACT QUESTIONNAIRE

Card = 1
Column =

Name of Interviewer _____	I. D. # 1/-6 _____
1. Name _____	6/ _____
2. Date of Birth _____	(AGE) 7/-3 _____
3. Sex _____ Male _____	1
_____ Female _____	2 9/ _____
4. Years of Education	
_____ 0-1 years _____	1
_____ 5-8 years _____	2
_____ High school incomplete _____	3
_____ High school completed _____	4
_____ Post high school; business or trade school _____	5
_____ 1-3 years of college _____	6
_____ College graduate _____	7
_____ Post college graduate education _____	8
_____ Not answered _____	9 10/ _____
5. Ethnicity:	
_____ Black _____	1
_____ White _____	2

5a. What is your religious group affiliation?

- 5b. How important is church or religion to you?

- ## 6. Marital Status

Single	1
Married	2
Separated	3

_____ Divorced _____	4	
_____ Widower _____	5	
_____ Widowed _____	6	
_____ Not answered _____	9	15/____

7. Number of Siblings

_____ Brothers	16/-17/____
_____ Sisters	18/-19/____

a) Birth Order:

_____ Only child _____	1	
_____ oldest _____	2	
_____ youngest _____	3	
_____ middle _____	4	20/____

a) If you are not an only child, nor one of the above categories listed under "birth order", please give the number in which you are born.

#_____ 21/-22____

8. Sun Sign (astrological)

_____ Capricorn _____	1
_____ Aquarius _____	2
_____ Pisces _____	3
_____ Taurus _____	4
_____ Gemini _____	5

<u> </u> Cancer <u> </u>	6
<u> </u> Leo <u> </u>	7
<u> </u> Virgo <u> </u>	8
<u> </u> Libra <u> </u>	9
<u> </u> Aries <u> </u>	10
<u> </u> Scorpio <u> </u>	11
<u> </u> Sagittarius <u> </u>	12

23/-24/___

9. Current occupational status

<u> </u> full time worker <u> </u>	1
<u> </u> parttime worker <u> </u>	2
<u> </u> unemployed <u> </u>	3
<u> </u> not answered <u> </u>	9

25/___

a) If working, what kind of work
do you do?

_____ 26/___

b) If you are a student, please
specify your status:

<u> </u> full time <u> </u>	1
<u> </u> part time <u> </u>	2
<u> </u> not answered <u> </u>	9

27/___

c) Income status:

IF A PARTTIME WORKING OR NONWORKING STUDENT
CHECK YOUR PARENTS INCOME LEVEL. IF A FULL
TIME EMPLOYEE, PLEASE CHECK YOUR OWN INCOME
LEVEL.

<u>YEARLY</u>	<u>MONTHLY</u>
01___ 0 - \$999	___(0 - \$83
02___ \$ 1,000 - \$ 1,999	___(\$ 84 - \$ 166)
03___ \$ 2,000 - \$ 2,999	___(\$167 - \$ 249)
04___ \$ 3,000 - \$ 3,999	___(\$250 - \$ 333)
05___ \$ 4,000 - \$ 4,999	___(\$334 - \$ 416)
06___ \$ 5,000 - \$ 5,999	___(\$417 - \$ 500)
07___ \$ 6,000 - \$ 6,999	___(\$501 - \$ 583)
08___ \$ 7,000 - \$ 7,999	___(\$584 - \$ 667)
09___ \$ 8,000 - \$ 8,999	___(\$668 - \$ 750)
10___ \$ 9,000 - \$ 9,999	___(\$751 - \$ 833)
11___ \$10,000 - \$10,999	___(\$834 - \$ 917)
12___ \$11,000 - \$11,999	___(\$918 - \$1,000)
13___ \$12,000 - \$12,999	___(\$1,001-\$1,083)
14___ \$13,000 - \$13,999	___(\$1,084-\$1,167)
15___ \$14,000 - \$14,999	___(\$1,168-\$1,250)
16___ \$15,000 - \$15,999	___(\$1,251-\$1,333)
17___ \$16,000 - \$16,999	___(\$1,334-\$1,417)
18___ \$17,000 - \$17,999	___(\$1,418-\$1,500)
19___ \$18,000 - \$18,999	___(\$1,501-\$1,583)
20___ \$19,000 - \$19,999	___(\$1,584-\$1,667)
21___ \$20,000 or more	___(\$1,668 or more)
99___ Not answered	99___ Not answered

Yearly Income 28/29/____
Monthly Income 30/31/____

PLEASE READ THE FOLLOWING QUESTIONS AND CIRCLE THE RESPONSE
THAT BEST DESCRIBES YOU.

10. When upset, I like someone to hold me.

___ Never	1
___ Almost never	2
___ Sometimes	3
___ Almost always	4
___ Always	5

32/____

11. When I can't sleep I find it easier to
to relax if I am held in someone's arms.

____ Never _____	1
____ Almost never _____	2
____ Sometimes _____	3
____ Almost always _____	4
____ Always _____	5

33/ _____

12. I use sex to get someone to hold me.

____ Never _____	1
____ Almost never _____	2
____ Sometimes _____	3
____ Almost always _____	4
____ Always _____	5

34/ _____

13. When I see a loved one, I initiate
"embracing".

____ Never _____	1
____ Almost never _____	2
____ Sometimes _____	3
____ Almost always _____	4
____ Always _____	5

35/ _____

14. I touch people when talking to them.

____ Never _____	1
____ Almost never _____	2

_____ Sometimes _____	3
_____ Almost always _____	4
_____ Always _____	5

36/ _____

15. I feel hurt if I am not held when I desire closeness with someone whom I find attractive.

_____ Never _____	1
_____ Almost never _____	2
_____ Sometimes _____	3
_____ Almost always _____	4
_____ Always _____	5

37/ _____

16. After sexual intercourse I like to be held.

_____ Never _____	1
_____ Almost never _____	2
_____ Sometimes _____	3
_____ Almost always _____	4
_____ Always _____	5

38/ _____

17. The opposite sex seems to find me attractive.

_____ Never _____	1
_____ Almost never _____	2
_____ Sometimes _____	3
_____ Almost always _____	4
_____ Always _____	5

39/ _____

18. I enjoy sexual relations.

Never	1
Almost never	2
Sometimes	3
Almost always	4
Always	5

40/

19. I enjoy watching contact sports, like football.

Never	1
Almost never	2
Sometimes	3
Almost always	4
Always	5

41/

20. I enjoy dancing.

Never (IF NEVER, SKIP TO #21)	1
Almost never	2
Sometimes	3
Almost always	4
Always	5

42/

If you enjoy dancing, which do you prefer?

Fast dancing	1
Fast and slow dancing	2
Slow dancing	3
does not apply	8

43/

21. I masturbate when i have no other sexual outlet.

____ Never _____	1
____ Almost never _____	2
____ Sometimes _____	3
____ Almost always _____	4
____ Always _____	5

44/____

22. I am a talkative person.

____ Never _____	1
____ Almost never _____	2
____ Sometimes _____	3
____ Almost always _____	4
____ Always _____	5

45/____

23. I eat for pleasure.

____ Never _____	1
____ Almost never _____	2
____ Sometimes _____	3
____ Almost always _____	4
____ Always _____	5

46/____

Body contact score (Sum the values of questions 10-20 47/-48/____
and 21-23)

Use of physical contact to induce relaxation (items
10 & 11)

49/-50/____

24. When you are alone and relaxing with your boyfriend/girlfriend what do you do?

____ I don't have a boyfriend/girlfriend 1
____ Not answered 9 51/____
a. I hold my partner.

____ Never	1	
____ Almost never	2	
____ Sometimes	3	
____ Almost always	4	
____ Always	5	52/____

b. My partner holds me.

____ Never	1	
____ Almost never	2	
____ Sometimes	3	
____ Almost always	4	
____ Always	5	
____ Does not apply	9	53/____

c. We hold each other.

____ Never	1	
____ Almost never	2	
____ Sometimes	3	
____ Almost always	4	
____ Always	5	
____ Does not apply	9	54/____

Intensity of contact between non-married couples.

FOR MARRIED PERSONS ONLY

25. When you are alone with your spouse
what do you do?

___ Does not apply, I am not married. Code = 9 57/___

a. I hold my partner.

___ Never	1	
___ Almost never	2	
___ Sometimes	3	
___ Almost always	4	
___ Always	5	
___ Does not apply	9	58/___

b. My partner holds me.

___ Never	1	
___ Almost never	2	
___ Sometimes	3	
___ Almost always	4	
___ Always	5	
___ Does not apply	9	59/___

c. We hold each other.

___ Never	1	
___ Almost never	2	
___ Sometimes	3	

Intensity of contact between married couples (Sum of items 25a - c, excluding those items with dna values) 61/62/

Yes	1
No	2
Sometimes	3
Uncertain/don't know	5
Never lived with my mother	5

63/

<u> </u> Yes _____	1
<u> </u> No _____	2
<u> </u> Sometimes _____	3
<u> </u> Uncertain/don't know _____	4
<u> </u> Never lived with my father _____	5

64/

Yes	1
-----	---

___ No _____	2	
___ Sometimes _____	3	
___ Uncertain/ don't know _____	4	
___ I don't have any friends _____	5	65/___

29. Are most of your friends male or female?

___ Male _____	1	
___ Female _____	2	
___ Both about equal _____	3	
___ Does not apply. Don't have friends _____	4	66/___

30. Do you ever have dreams about body contact?

___ Never _____	1	
___ Almost never _____	2	
___ Sometimes _____	3	
___ Almost always _____	4	
___ Always _____	5	67/___

IF SO, PLEASE DESCRIBE THEM IN DETAIL. USE THE OTHER
SIDE OF THIS PAGE TO COMPLETE YOUR ANSWER IF IT IS
NEEDED.

31. How often do you have sex?

_____ Everyday _____	1
_____ One or more times a week _____	2
_____ About every two weeks _____	3
_____ At least once a month _____	4
_____ Seldom _____	5
_____ Almost never _____	6
_____ Never _____	7

68/ _____

32. Did you grow up in a two parent family of origin?

_____ No (IF NO, SKIP TO NUMBER 33.)	1
_____ Yes, through childhood only	2
_____ Yes, through childhood and adolescence (up through 18 years of age)	3
_____ Yes, I lived with both my parents until I decided to leave home	4
_____ Yes, I lived with both parents until I got married	5
_____ Yes, I continued to live with my parents even after I got married	6
_____ does not apply	8
_____ not answered	9

69/ _____

33. By whom were you reared, if not in a two parent family of origin:

	1	2	8	9
	yes	no	dna	na
_____ My mother, only ..				
_____ My father, only				
_____ Grandmother				
_____ Grandfather				
_____ Both Grandmother & Grandfather ...				

70/ _____

71/ _____

72/ _____

73/ _____

74/ _____

	1 yes	2 no	8 dna	9 na	
Stepmother					75/
Stepfather					76/
Sisters					77/
Brothers					78/
Other family (aunts, uncles)					79/

80/Blank

Start Card = 2
Column #:

34. Do you have any children of your own? I.D. 1/-5/

Yes	1	
No (IF NO, SKIP TO QUESTION #36	2	
Not answered	9	7/

IF YES, HOW MANY?

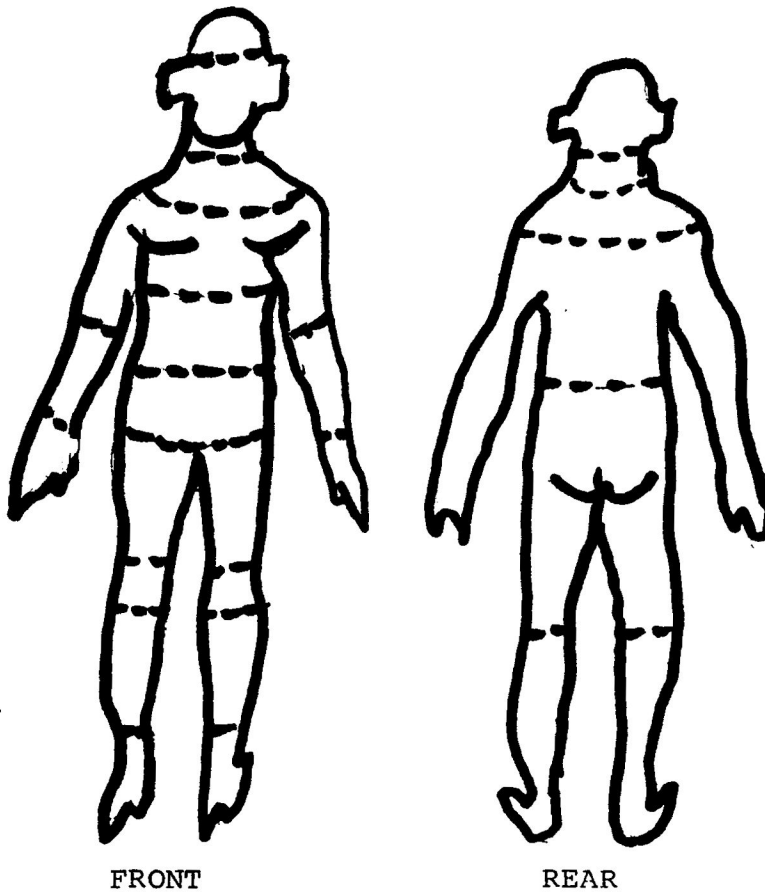
#	
None, does not apply. Code 98	8/-9/
Not answered Code 99	

35. Are you a contact person in relation to your own children?

Never	1	
Almost never	2	
Sometimes	3	
Almost always	4	
Always	5	10/

BRIEFLY DESCRIBE WHY BODY CONTACT IS, OR IS NOT, IMPORTANT TO YOU. (Please use the back of this sheet if additional space is needed.)

FIGURE I. FRONT AND REAR
VIEWS OF BODY REGIONS



IN RECENT MONTHS, THE "FREAK" WAS A DANCE DONE AT DISCO'S AND OTHER PARTY SETTINGS IN PUBLIC PLACES.

36a. Have you ever done the freak?

____ Yes, IF YES, answer 36b _____ 1

____ No _____ 2

____ Not answered _____ 9

11/____

36b. If yes, please mark on the drawings shown at the top of this page the regions on the body that you touched when you did the freak with a member of the opposite sex.

NOTE: PLEASE USE THE FOLLOWING NUMERICAL VALUES TO INDICATE
THE REGIONS TOUCHED ON THE BODY OF YOUR DANCE PARTNER.

- 1 = region most frequently touched
- 2 = region sometimes touched
- 3 = region least frequently touched
- 4 = never touched

If you did the freak, but did not touch, please explain why.
Use the back of this page if you need more space.

Thank you for your cooperation.

BIBLIOGRAPHY

- Aiello, J. and Jones, R. "Field Study of the Proxemic Behavior of Young Children in Three Subcultural Groups." Journal of Personality and Social Psychology 19 (1971): 351-356.
- Argyle, M. The Psychology of Interpersonal Behavior. Baltimore: Penguin Books Inc., 1967.
- Argyle, M. and Dean, J. "Eye-Contact, Distance and Affiliation." Sociometry 28 (1965): 289-304.
- Baron, R. A. and Byrne, D. Exploring Social Psychology. Boston: Allyn and Bacon, Inc., 1979.
- Bauer, E. A. "Personal Space: A Study of Blacks and Whites." Sociometry 36 (1973): 402-408.
- Baxter, J. C. "Interpersonal Spacing in Natural Settings." Sociometry 33 (1970): 444-456.
- Boomer, D. S. and Dittman, A. T. "Hesitation, Pauses, and Juncture Pauses in Speech." Language and Speech 5 (1962): 215-220.
- Broverman, I. K.; Vogel, S. R.; Broverman, D. M.; Clarkson, F. E.; and Rosenfrantz, P. S. "Sex-Role Stereotypes: A Current Appraisal." Journal of Social Issues 28 (1972): 59-78.
- Burton, A. and Heller, L. G. "The Touching of the Body." Psychoanalytic Review 51: 122-134.
- Dean, S. R. "Geriatric Sexuality: Normal, Needed, and Neglected." Geriatrics 29 (1974): 134-137.
- Duncan, S. D. "Nonverbal Communication." Psychological Bulletin 72 (1969): 118-137.
- Ekman, P. and Friesen, W. V. "The Repertoire of Nonverbal Behavior: Categories, Origins, Usage, and Coding." Semiotica 1 (1969): 49-98.

- Ellis, L. J. and Bentler, P. M. "Traditional Sex Determined Role Standards and Sex Stereotypes." Journal of Personality and Social Psychology 25 (1973): 28-34.
- Evans, G. W. and Howard, R. B. "Personal Space." Psychological Bulletin 80 (1973): 334-344.
- Exline, R. V. "Explorations in the process of Person Perception: Visual Interaction in Relation to Competition, Sex, and Need for Affiliation." Journal of Personality 31 (1963): 1-20.
- Fisher, J. D.; Rytting, M.; and Heslin, R. "Hands Touching Hands: Effective and Evaluative Effects of an Interpersonal Touch." Sociometry 39 (1976): 416-421.
- Frank, R. L. "Tactile Communication." Genetic Psychology Monographs 56 (1957): 209-255.
- Frieze, I. H. and Ramsey, S. J. "Nonverbal Maintenance of Traditional Sex Roles." Journal of Social Issues 32 (1976): 133-141.
- Gewirtz, J. L. and Baer, D. M. "The Effect of Brief Social Deprivation on Behavior for a Social Reinforcer." Journal of Abnormal and Social Psychology 56 (1958): 49-56.
- Goffman, E. "On Face-Work: An Analysis of Ritual Elements in Social Interaction." Psychiatry 18 (1955): 213-231.
- Greenbaum, P. E. and Rosenfeld, H. M. "Varieties of Touching in Greetings: Sequential Structure and Sex Related Differences." Journal of Nonverbal Behavior 56 (1981): 13 - 25.
- Hall, E. T. "A System for the Notation of Proxemic Behavior." American Anthropologist 65 (1963): 1003-1026.
- Heshka, S. and Nelson, Y. "Interpersonal Speaking Distance." Sociometry 35 (1972): 491-498.
- Ickes, W. and Barnes, R. D. "Boys and Girls Together and Alienated: On Enacting Stereotyped Sex-Roles in Mixed-Sex Dyads." Journal of Personality and Social Psychology 36 (1978): 669-683.

- Jones, S. E. "A Comparative Proxemic Analysis of Dyadic Interaction in Selected Subcultures of New York City." Journal of Social Psychology 84 (1971): 35-44.
- Jourard, S. M. and Rubin, J. E. "Self-Disclosure and Touching: A Study of Two Modes of Interpersonal Encounter and Their Interrelation." Journal of Human Psychology 8 (1968): 39-48.
- LaBarre, W. "The Cultural Basis of Emotions and Gestures." Journal of Personality 16 (1967): 49-68.
- Leibman, M. "The Effects of Sex and Race Norms on Personal Space." Environment and Behavior 2 (1970): 208-248.
- Little, K. B. "Personal Space." Journal of Experimental Social Psychology 1 (1965): 237-247.
- Mazur, A. "Interpersonal Spacing on Public Benches in Contact-vs-Noncontact Cultures." Journal of Social Psychology 101 (1977): 53-58.
- Newman, G. and Nichols, C. R. "Sexual Activities and Attitudes in Older People." Journal of The American Medical Association 173 (1960): 33-35.
- Nguyen, T. D.; Heslin, R.; and Nguyen, M. L. "The Meaning of Touch: Sex Differences." Journal of Communication 25, 3 (1975): 92-103.
- Patterson, M. L. "Interpersonal Distance, Affect, and Equilibrium Theory." Journal of Social Psychology 101 (1977): 205-214.
- _____. "Stability of Nonverbal Immediacy Behaviors." Journal of Experimental Social Psychology 9 (1973): 97-109.
- Pfieffer, E. "Sexuality in the Aging Individual." Journal of The American Geriatrics Society 22 (1974): 481-484.
- Reedy, M. N.; Birren, J. E.; and Schaie, K. W. "Age and Sex Differences in Satisfying Love Relationships Across the Adult Life Span." Human Development 24 (1981): 52-66.

- Schachter, S. The Psychology of Affiliation. Stanford: Stanford University Press, 1959.
- Scherer, S. E. "Proxemic Behaviors of Primary School Children as a Function of Their Socioeconomic Class and Subculture." Journal of Personality and Social Psychology 29 (1974): 800-805.
- Schmidt, W. H. O. and Hore, T. "Some Nonverbal Aspects of Communication Between Mother and Preschool Child." Child Development 41 (1970): 880-896.
- Sommer, R. and Ross, H. "Social Interaction on a Geriatric Ward." International Journal of Social Psychiatry 4 (1958): 128-133.
- Sundstrom, E. and Altman, I. "Personal Space and Interpersonal Relations: Research Review and Theoretical Model." Human Ecology 4 (1976): 47-67.
- Triandis, H. C. Interpersonal Behavior. Belmont: Wadsworth Publishing Company, Inc., 1977.
- Walters, R. H. and Parke, R. D. "Social Motivation, Dependency, and Susceptibility to Social Influences." Advances in Experimental Social Psychology 1 (1964).
- Watson, O. M. and Graves, T. D. "Quantitative Research in Proxemic Behavior." American Anthropologist 68 (1966): 971-985.
- Watson, W. H. "The Meanings of Touch: Geriatric Nursing." Journal of Communication 25 (1975): 104-112.
- _____. "The Body Contact Questionnaire." The National Center on Black Aged, Washington, D. C., 1978.
- West, N. G. "Sex in Geriatrics: Myth or Miracle?" Journal of The American Geriatrics Society 23 (1975): 551-552.
- Williams, S. J. and Willis, F. N. "Interpersonal Touch Among preschool Children at Play." Psychology Records 28 (1978): 501-508.

Willis, F. N. and Reeves, D. L. "Touch Interactions in Junior High Students in Relation to Sex and Race." Developmental Psychology 12 (1976): 91-92.

Willis, F. N. and Hoffman, G. "The Development of Tactile Patterns in Relation to Age, Sex, and Race." Developmental Psychology 11 (1975): 866.